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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,586	09/22/2003	Palanisamy Arjunan	2002B170	9631

23455	7590	07/17/2007
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EXAMINER	
RABAGO, ROBERTO	

ART UNIT	PAPER NUMBER
1713	

MAIL DATE	DELIVERY MODE
07/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/667,586

Applicant(s)

ARJUNAN ET AL.

Examiner

Roberto Rábago

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 44-71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 44-50,53,54,59,63-65 and 67-71 is/are allowed.
- 6) ☒ Claim(s) 51,52,55-58,61 and 66 is/are rejected.
- 7) ☒ Claim(s) 60 and 62 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed 4/16/2007 has cancelled claims 1-43 and presented new claims 45-71. Claim 44 is not a new claim, and applicants have incorrectly labeled the claim as (new). Correct status identifiers are required by 37 CFR 1.121; although minor errors in status identifiers are sometimes excused, substantial errors such as the indication of a (previously presented) claim as (new) serve to confuse the record regarding which claim elements have been previously examined. Applicants are advised that any subsequent failure to include correct status identifiers may result in applicants' amendment being returned as noncompliant.

Previously presented claim 44 was indicated as allowable in the last Office action. Although the required metallocene and supercritical conditions are known in the art for making crystalline polypropylene, the instant claims require that the heat of fusion be precisely 70 J/g; the prior art has not disclosed or suggested the required method for making such a specific polymer. Newly presented dependent claims 45-71 also include this requirement, and are therefore not rejected over prior art. Applicants are reminded that any broadening of the claims, or any other amendment requiring further consideration or search, will not be entered or considered after final rejection unless accompanied by a Request for Continued Examination.

Claim Objections

2. Claim 56 is objected to because, in combination with the image degradation from applicants' FAX transmission, the structural superscripts are too small to be properly legible.

Claims 60 and 62 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The parent claim already requires an activator comprising a non-coordinating anion, which is necessarily an activator which ionizes.

Claim Rejections - 35 USC § 112

3. Claims 55 and 61 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

(a) In claim 55, on "page 6 of 38" of applicants' response filed 4/16/2007, the sixth species has no ligands on zirconium other than the indenyl rings. The specification has been reviewed, but no support can be found for this particular species including Zr^{2+} as would be required for the structure as written. It would appear that the dimethyl analog was intended.

Art Unit: 1713

(b) In claim 61, no support can be found for the combination of activators requiring a non-coordinating anion (from the parent claim) and alumoxane.

4. Claims 51, 52, 55, 56, 57, 58 and 66 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) Claims 51 and 52 are indefinite because they are not within the scope of the parent claim. Claim 44 is limited to the making of homopolypropylene, and therefore the comonomer component of claims 51 and 52 is excluded. Claim 57 is also rejected on the same grounds in the event that it should have depended from parent claim 44.

(b) In claim 55, the following species are indefinite because they are not metallocenes as required by the preamble and the parent claims: on page 13 of 38, the fourth species, through page 16, ninth species; on page 17 of 38, the nineteenth species, through page 19, eleventh species; on page 22, the eleventh species, through page 24, seventh species; on page 27, the twelfth species, through page 29, ninth species. None of these structures include a transition metal component, and therefore they are not metallocenes. Accordingly, the intended meaning of including these structures cannot be determined.

(c) In claim 56, the third definition of R^1 and R^2 is indefinite in view of the presence of exemplary embodiments.

(d) Claims 57 and 58 are indefinite because they depend from cancelled claims.

(e) Claim 66 recites the limitation "the support". There is insufficient antecedent basis for this limitation in the claim, and it would appear that the claim should have depended from claim 65.

5. Claims 44-50, 53, 54, 59, 63-65, and 67-71 are allowed.

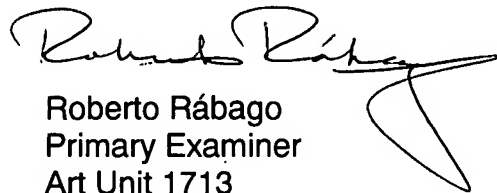
6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Roberto Rábago
Primary Examiner
Art Unit 1713

RR
July 8, 2007